Amendments to the Claims

Please amend the claims to read as follows.

1. (Cancelled)

2. (Currently amended) ~~A method according to claim 1~~ A method of processing telecommunications signals comprising the steps of:

transforming an original signal to produce an absolute value of the original signal;

transforming a delayed signal to produce an absolute value of the delayed signal;

applying a low pass filter to the absolute value of the original signal to provide an original-signal envelope estimate;

applying a low pass filter to the absolute value of the delayed signal to provide a delayed-signal envelope estimate; and

applying a delay estimation function to the original-signal envelope estimate and the delayed-signal estimate to provide an estimate of the delay between the original signal and the delayed signal;

wherein the delay estimation function comprises an average magnitude difference function.

3-10. (Cancelled)

11. (Currently amended) ~~A method according to claim 10~~ A method of processing telecommunications signals comprising the steps of:

transforming an original signal to produce an absolute value of the original signal;

transforming a delayed signal to produce an absolute value of the delayed signal;

applying a low pass filter to the absolute value of the original signal to provide an original-signal envelope estimate;

applying a low pass filter to the absolute value of the delayed signal to provide a delayed-signal envelope estimate;

applying a delay estimation function to the original-signal envelope estimate and delayed-signal envelope estimate to provide an estimate of the delay between the original signal and the delayed signal;

wherein the delay estimation function comprises an average magnitude difference function.

12-22. (Cancelled)

23. (Currently amended) ~~An apparatus according to claim 20~~ An apparatus for estimating a delay in a telecommunication signal comprising:

an absolute value generator for producing an absolute value of an original signal and an absolute value of a delayed signal;

a filter means connected with the absolute value generator for altering the absolute value of the original and the delayed signals to provide an estimate of the original-signal envelope and the delayed-signal envelope; and

a delay estimation means for receiving the signal envelopes and for estimating the delay between the original signal and the delayed signal from the reduced original-signal envelope and the reduced delayed-signal envelope; and

a sample reduction means connected with the filter means for reducing the sampling rate of the signal envelope estimates to provide a reduced original-signal envelope estimate and a reduced delayed-signal envelope estimate;

wherein the delay estimation means comprises an average magnitude difference function.

24-29. (Cancelled)

30. (Currently amended) ~~An apparatus according to claim 27~~ An apparatus for estimating a delay in a telecommunication signal comprising:

a sample reduction means for reducing the sampling rate of an original signal and a delayed signal;

an absolute value generator connected with the sample reduction means for producing an absolute value of the reduced original signal and an absolute value of the reduced delayed signal;

a filter means connected with the absolute value generator for altering the absolute value of the reduced original signal and the reduced delayed signal to provide an estimate of the original-signal envelope and the delayed-signal envelope; and

a delay estimation means for receiving the signal envelopes and for estimating the delay between the original signal and the delayed signal from the original-signal envelope estimate and the delayed-signal envelope estimate;

wherein the delay estimation means comprises an average magnitude difference function.

31-34. (Cancelled)